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EXAMINER

VORTMAN, ANATOLY

ART UNIT

PAPER NUMBER

2835

DATE MAILED: 07/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/874,453

Applicant(s)

KALRA ET AL.

Examiner

Anatoly Vortman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2003 (RCE).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Amendment

1. By amendment filed on 03/20/03 the Applicant has amended independent claims 1, 7, and 12. Claims 1-20 are pending in the instant application.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/20/03 has been entered.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4, 7, 9, 10, 12, and 15-20, are rejected under 35 U.S.C. 102(b) as being anticipated by US/1,466,423 to Conrad.

Regarding claims 1, 4, 7, 12, and 15, Conrad disclosed (Fig. 2-6) a fuse comprising a fuse body (11) comprising a first end a second end and a bore having a circular cross section and extending therethrough, said bore comprising a clearing portion having a first cross sectional area and a positioning portion (15) having a second cross sectional area; said first cross sectional area different (larger) than said second cross sectional area; and

a fuse element assembly (Fig. 3) situated in said bore between terminals (13, 14) enclosing the ends of the fuse body (11) (Fig. 4), said fuse element assembly comprising an outer dimension (41) substantially coextensive with said second cross sectional area, said outer dimension (41) substantially centered within said first cross sectional area, thereby ensuring a clearance between said fuse element assembly and said fuse body (11) within said clearing portion, thus preventing the fuse element from contacting an interior surface of the clearing portion (Fig. 4, 5).

Regarding claims 2 and 18, Conrad disclosed that said clearing portion extends for a first length, said positioning portion (15) extends for a second length, said first length greater than said second length.

Regarding claims 3, 9, 10, 16, 19 and 20, Conrad disclosed that said bore further comprising a conical guide portion (17) having a third length which is less than said first length or said second length, and intermediate said clearing portion and said positioning portion (15), said guide portion (17) further comprising a cross sectional area intermediate said first cross sectional area and said second cross sectional area (Fig. 2).

Regarding claim 17, Conrad disclosed (Fig. 8) that said fuse element assembly comprises at least one fuse element (51) comprising a first end, a second end, and a central portion, said

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fuse element assembly situated in said bore so that said central portion of said at least one fuse element is disposed within said clearing portion (Fig. 4, 5).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 6, 8, and 13, are rejected under 35 U.S.C. 103(a) as being unpatentable over Conrad ('423).

Regarding claims 6, 8, and 13, Conrad disclosed all of the claims limitations as apply to claims 1, 7, and 12, respectively, but did not disclose that said fuse body (11) is fabricated from Alumina Zirconia.

Alumina Zirconia (ceramic) has been notoriously known in the fuse art at the time the invention was made as a well-suited material for manufacturing components of fuses. Therefore, it would have been obvious to a person of ordinary skill in the fuse art at the time the invention was made to select any suitable material, including said Alumina Zirconia ceramic, for making said fuse body of Conrad, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

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7. Claims 5, 11, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Conrad in view of US/5,214,406 to Reese et al., (Reese).

Regarding claims 5, 11, and 14, Conrad disclosed all of the claims limitations as apply to claims 3, 7, and 12, respectively, but did not disclose that said fuse body is substantially rectangular and has substantially square end surfaces.

Reese disclosed a fuse (Fig. 1-5) having a fuse body, which is substantially rectangular, and has substantially square end surfaces.

Since the inventions of Conrad and Reese are from the same field of endeavor (electrical fuses), the purpose of the rectangular fuse body disclosed by Reese would be recognized in the invention of Conrad.

It would have been obvious to a person of ordinary skill in the fuse art at the time the invention was made to produce said fuse body of Conrad in substantially rectangular shape as taught by Reese in order, for example, to facilitate mounting of the fuse.

Response to Arguments

8. Applicant's arguments filed on 03/20/03 have been fully considered but they are not persuasive.

Regarding the Applicant's position that "the sleeve (11) of the socket member (2) described by Conrad, which the office action equates with the fuse body, does not enclose the plug member" (Applicant's amendment, page 4, lines 10+), the Examiner would like to direct the Applicant's attention to the fact that claims of the instant application do not call for the fuse

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element to be enclosed by the fuse body. Claim 12 only recites that "fuse element assembly enclosed in said bore". The fuse body (10) of the present invention does not enclose the fuse assembly (42) either, as shown on (Fig. 2, 3) of the instant application. The fuse body requires additional caps (52, 54) in order to do so.

Furthermore, the Applicant is believed to be confusing the fuse element assembly (Fig. 3) and the fuse element wire (51) disclosed in Conrad ('423) reference (p. 4 of the Amendment). Please, note that the Examiner had never referred to the fuse element wire (51) in the rejection, but only to the entire fuse assembly as depicted on Fig. 3 (see paragraph 2 of the Final Office Action). Therefore, all relevant Applicant's arguments are believed to be moot.

Regarding the Applicant's position that "there is no evidence on the record, other than a mere statement in the Office Action to the contrary, that Aluminum Zirconia has been notoriously used to construct fuses" (p. 7, lines 5+ of the Amendment), please note that the aforementioned statement had been originally presented in the First Office Action (paper # 4, paragraph 6), and has never been seasonably challenged in the following Applicant's response (paper # 6). It is well settled that if Applicant does not seasonably traverse the well known statement during examination, then the object of the well known statement is taken to be admitted prior art. *In re Chevenard*, 139 F. 2d 71, 60 USPQ 239 (CCPA 1943). A seasonable challenge constitutes a demand for evidence made as soon as practicable during prosecution. Therefore, by not seasonably challenging the Examiner's statement regarding the use of the Aluminum Zirconia in the original response (paper # 6), the Applicant thereby has admitted that Examiner's statement (i.e. that Aluminum Zirconia has been notoriously known and used to construct fuses), to be a prior art.

In conclusion, in relation to the Applicant's arguments regarding the prima facie case of obviousness (i.e. that references has not been properly combined, because they teach different types of fuses (p. 7, lines 18+ of the amendment), please note that the Examiner recognizes that references cannot be arbitrarily combined and that there must be some reason why one skilled in the art would be motivated to make the proposed combination of primary and secondary references. *In re Nomiya*, 184 USPQ 607 (CCPA 1975). However, there is no requirement that a motivation to make the modification be expressly articulated. The test for combining references is what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art. *In re McLaughlin*, 170 USPQ 209 (CCPA 1971). References are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures. *In re Bozek*, 163 USPQ 545 (CCPA) 1969. Also, as decided in *In re O'Farrel*, 7 USPQ 2d, 1673-1681, Fed. Cir. 1988, obviousness does not require absolute predictability of success. Indeed, for many inventions that seem quite obvious, there is no absolute predictability of success until the invention is reduced to practice. There is always at least a possibility of unexpected results that would then provide an objective basis for showing that the invention, although apparently obvious, was in law nonobvious. *In re Merck & Co.*, 800 F.2d at 1098, 231 USPQ at 380; *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 1461, 221 USPQ 481, 488 (Fed. Cir. 1984); *In re Papesch*, 315 F.2d 381, 386-387, 137 USPQ 43, 47-48 (CCPA 1963). For obviousness under 35 U.S.C. 103, all that is required is a reasonable expectation of success. *In re Longi*, 759 F.2d 887, 897, 225 USPQ 645, 651-652 (Fed. Cir. 1985); *In re Clinton*, 527 F.2d 1226, 1228, 188 USPQ 365, 367 (CCPA 1976).

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Therefore, in view of the above, the Examiner believes that combination of references in 35 USC 103 rejection was proper.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anatoly Vortman whose telephone number is 703-308-7824. The examiner can normally be reached on Monday-Friday, between 9:30am and 6:00 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Darren Schuberg can be reached on 703-308-4815. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3431 for regular communications and 703-305-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1782.

A.V.
June 30, 2003



Anatoly Vortman
Primary Examiner
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